CLAIMS

I Claim:

Claim 1 - A bag comprising, in combination:

a first bag portion having a substantially planar outer wall, a radiused edge wall circumscribing said planar outer wall and peripheral flashing circumscribing said radiused edge wall,

a second bag portion sealed to said peripheral flashing and overlying said planar outer wall of said first bag portion such that said planar outer wall is spaced from said second bag portion by a dimension at least equal to a radius of said radiused edge wall.

Claim 2 - The bag of claim 1 wherein said bag contains thermolabile substances.

Claim 3 - The bag of claim 1 wherein said bag contains cellular biological substances.

Claim 4 - The bag of claim 1 wherein an interior of said bag communicates with an exterior by means of a portal.

Claim 5 - The bag of claim 4 wherein said portal extends through said flashing.

Claim 6 - The bag of claim 5 wherein a partition is provided within said bag defining an area of demarcation in said bag including at least two compartments separated one from the other by said partition.

Claim 7 - The bag of claim 6 wherein a second portal is provided such that one portal communicates with said first compartment and another portal communicates with said second compartment.

Claim 8 The bag of claim 7 wherein said compartments communicate with each other by a passageway.

Claim 9 - The bag of claim 8 wherein said passageway includes means to prevent through communication therebetween.

Claim 10 - The bag of claim 9 wherein said bag second portion is symmetrical to said first portion.

Claim 11 - The bag of claim 1 wherein said bag second portion is symmetrical to said first portion.

Claim 12 - The bag of claim 11 wherein an interior of said bag communicates with an exterior by means of a portal.

Claim 13 - The bag of claim 12 wherein said portal extends through said flashing.

Claim 14 - The bag of claim 13 wherein a partition is provided within said bag defining an area of demarcation in said bag including at least two compartments separated one from the other by said partition.

Claim 15 - The bag of claim 14 wherein a second portal is provided such that one portal communicates with said first compartment and another portal communicates with said second compartment.

Claim 16 - The bag of claim 15 wherein said compartments communicate with each other by a passageway.

Claim 17 - The bag of claim 16 wherein said passageway includes means to prevent through communication therebetween.

Claim 18 - The bag of claim 17 wherein said passageway has walls formed from material which can be fused to provide sealing.

Claim 19 - A method for forming a bag, the steps including:

forming a first mold having a recess including a planar surface, a radiused periphery circumscribing said planar surface and a peripheral ledge circumscribing said radiused periphery and oriented parallel to said planar surface,

placing a blank of sheet material over said first mold, and causing the blank to conform to the mold,

removing the formed sheet and enclosing the bag.

Claim 20 - The method of claim 19 including containing within said bag thermolabile substances.

Claim 21 - The method of claim 19 including containing within said bag cellular biological substances.

Claim 22 - The method of claim 19 wherein enclosing the bag is performed by forming a second mold having a mirror image of the first mold and placing a blank of sheet material over said second mold causing the blank to conform to the mold and forming the bag by registering the formed sheet from the first mold and formed sheet from the second mold together.

Claim 23 - The method of claim 22 including forming a plurality of portals passing into an interior of the bag by providing a portal shaped recess on both the first mold and the second mold.

Claim 24 - The method of claim 23 including providing a partition in the mold so that at least two compartments are defined within the mold so that each formed sheet when united will define two compartments in the bag.

Claim 25 - The method of claim 24 including providing a passageway between the two compartments by providing an access in the mold adjacent the partition, bridging the partition and allowing communication between the first and second compartment.

Claim 26 - The method of claim 25 including providing portals for all compartments.

Claim 27 - The method of claim 26 including sealing the peripheral flashing of each formed sheet by adhering the peripheral flashing causing molecular excursions between the two formed sheets.

Claim 28 - A bag formed by:

deforming a first sheet of material to have a planar outer wall, a radiused edge wall circumscribing said outer wall and peripheral flashing circumscribing said edge wall oriented parallel to said outer wall and defining a pocket,

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sealing the pocket with a second sheet of material.

Claim 29 - The bag of claim 28 wherein said bag contains thermolabile substances.

Claim 30 - The bag of claim 28 wherein said bag contains cellular biological substances.

A Claim 31 - The ~~method~~ bag of claim 28 wherein enclosing the bag is performed by forming a second mold having a mirror image of the first mold and placing a blank of sheet material over said second mold causing the blank to conform to the mold and forming the bag by registering the formed sheet from the first mold and formed sheet from the second mold together.

A Claim 32 - The ~~method~~ bag of claim 31 including forming a plurality of portals passing into an interior of the bag by providing a portal shaped recess on both the first mold and the second mold.

Claim 33 - The method of claim 32 including providing a partition in the mold so that at least two compartments are defined within the mold so that each formed sheet when united will define two compartments in the bag.

Claim 34 - The method of claim 33 including providing a passageway between the two compartments by providing an access in the mold adjacent the partition, bridging the partition and allowing communication between the first and second compartment.

Claim 35 - The method of claim 34 including providing portals for all compartments.

Claim 36 - The method of claim 35 including sealing the peripheral flashing of each formed sheet by adhering the peripheral flashing causing molecular excursions between the two formed sheets.

Claim 37 - A mold for forming bags comprising, in combination:

a recess including a planar surface, a radiused periphery circumscribing said planar surface and a peripheral ledge circumscribing said radiused periphery and oriented parallel to said planar surface,

means for receiving a blank of sheet material over said recess and lapped atop said peripheral ledge, and

means for conforming the sheet material blank to a contour of the mold.

Claim 38 - The mold of claim 37 including a relief area to define an access portal into the mold cavity for providing a portal into the formed bag.

Claim 39 - The mold of claim 38 including a partition interposed within a portion of the mold dividing the mold into at least two compartments.

Claim 40 - The mold of claim 39 including providing an access passageway between the first and second compartments and passing through the partition.

Claim 41 - The mold of claim 40 including a portal located addressing each of the compartments.

Claim 42 - The mold of claim 41 including a second mold having a mirror symmetry with the first mold so that the bag formed thereby has a thickness twice the radius of one mold.

Claim 43 - The mold of claim 42 wherein the formed bag contains thermolabile substances.

Claim 44 - The mold of claim 42 wherein the formed bag contains cellular biological substances.

Claim 45 - A method of reducing breakage in plastic containers made from two plastic co-planar sheets sealed at the periphery and into which access ports are incorporated comprising:

vacuum forming a shape into each of the co-planar sheets such that a recess is formed defined by a planar wall, and

a transition from the planar wall to a peripheral ledge with a radius extending between the ledge and the planar wall whereby the formed planar sheets are of substantially uniform thickness throughout and relieved of stress.